



le bison battle over a prospective mate. Neither wants to relinquish what he may have traveled a great distance to find.

Snooty male bison are the pickier sex

Biologist says amorous bulls sniff out the most fertile mating prospects

Michele Ostrove
National Geographic News Service

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Five summers of chasing amorous bison through the South Dakota Badlands have taught Joel Berger an unexpected lesson about love in the animal kingdom:

When it comes to mating, males, not females, choose their partners. What are the shaggy, humpbacked animals looking for? Not good looks or personality, but a far more utilitarian quality — fertility.

Male bison search out the females that are most likely to give them an offspring within the next year, says Berger, a biologist at the University of Nevada and director of the study on bison reproductive behavior.

"This is an important discovery, because in virtually all species of mammals today, people have presumed females are the choosy ones," says Berger. "Nobody has previously demonstrated that males may be as discriminating."

Berger's findings have led many biologists to suspect, as he says, that male selectivity may also apply to other mammals.

"This type of data is quite difficult to gather, so it's likely that other mammals also do similar things that we've been unable to observe," says Berger.

I suspect most species have complex and subtle behaviors they use to



To mate or not to mate? The nose knows. A male bison sniffs a female candidate.

to Berger and his assistants. Because they had neither roads nor cars, they were covered as much as 14 miles a day on foot. Their work shifts began at 3:30 a.m. and ended at dusk.

The project offered its share of thrills. For real excitement, says researcher Carol Cunningham, nothing

surpasses being mobbed by a herd of curious bison — or being charged by an angry or surprised one.

"When you're surrounded, there's no way to get out; there are no trees to climb," she says, recalling numerous incidents of people being gored by bison in national parks. "All we could do was throw rocks and jump

up and down."

A bison running at you full tilt, eyes glaring and horns lowered, is a experience that leaves you shaking, Cunningham says. "You don't run. That would be the worst thing to do. You just stand your ground and hope the bluff works."

Fortunately for her, it always d

usband, stances

did the passenger pigeon become
nd of pigeons that poop on statues
ouse?

ow the basic story of the passenger
em all. What makes this extinction
us and baffling is that there were
pigeons than any other type of bird
monly estimated that two of every
America in the early 1800s — 40
enger pigeons.

incredible when you read descrip-
ck" of these pigeons looked like:
an angry storm front rolling in from
on to another. Where they nested,
ed like it was blanketed in snow.
ornithologist James Audubon once
ting pigeons so thick that the "light
as obscured as by an eclipse." They
for hours, and Audubon guessed
st a billion birds. Another ornithol-
lson, visited a pigeon breeding
in 1806 and guessed that it held
— how he got that number seems a
et's just assume there were a lot of

their feathers made good pillows.
packed that killing them was as
a barrel.

it gun down thousands of birds at
o long and cost too much. So the
ed large nets. To get the birds into
"stool pigeon," which was a live
n shut and feet attached to a post,
ould act agitated — understand-
the other birds.

g group was tracked down in 1896
Ohio. Of the 250,000 birds, only
The ones that were harvested went
trying the carcasses derailed, and
ed in the heat.)

5,000 seek refuge somewhere?
d on top of government buildings?

multifold: A female passenger pi-
at a time, so they don't reproduce
ge numbers of birds was largely a
each bird lives, up to 25 years in
problem was that the birds tended
tral spot, making them easy to
e the telegraph and locomotive
nd travel throughout the United
station destroyed their habitat.
problem — they didn't reproduce
o interest. They were not sexually
nd bear offspring like a bird ver-
riet Nelson. To get their juices
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gs. Like New York's Studio 54
t, they needed a critical mass to

an
g, geon, named Martha, died at the
— (How they knew it was named
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nd

d. e of never correcting errors, on

Cure the common shoplifter — nuke 'em

AT WIT'S END



**ERMA
BOMBECK**

When I was in college, I wrote
for the in-house magazine of a
large department store. A thin wall
separated our offices from the
store's security force. All day long,
a stream of shoplifters were
brought there for questioning, giv-
ing new meaning to the words
"self-service." I couldn't help
overhearing their bizarre stories,
punctuated by tears and hysteria.

After a while, it wasn't enough
to have store detectives, walkie-
talkies and two-way mirrors in the fitting rooms.
Filching was getting out of hand. The white plastic
safety tag was born. I have often said if savings &
loans could have protected their investors' monies
with the same little white plastic safety tags, we
wouldn't be in the mess we are in today.

A friend of mine bought and paid for a gauze dress,
and when she got it home realized the salesperson
had forgotten to remove the tag. It wasn't pleasant
when the tag whacked her knees like an anchor with
every step, but it was better than taking the garment
back to the store. In the end, however, it was the
public reaction to it that she couldn't live with. That
white plastic tag made Hester's scarlet A look like a

piece of costume jewelry. People assumed she had
stolen it.

Recently, stores unveiled a new weapon in the war
against stealing that is like a grenade. It's called the
"Inktag," and this is how it works. If the little white
capsule attached to the garment is not removed by a
special tool, three vials inside break and permanent
ink sprays out. Not only is the garment ruined, but
the person breaking the seal runs the risk of being cut
by broken glass and jagged metal.

If this doesn't work, I don't know where we go
from here. Maybe we're looking at the Bubble Button
— a small, round piece of plastic that if not removed
professionally will inflate the dress, coat or skirt like
an air mattress, making it impossible to remove from
the store. Or how about the Terminator Tag? When a
shoplifter tries to twist it off, a mine explodes and the
garment vanishes in a mushroom cloud.

All of this could get pretty ugly before a solution is
found. We could possibly see clothes protected by an
innocent-looking cap that when forced open would
release the smell of sweat to penetrate the garment
for the rest of its life.

I'd hate to see stores resort to the ultimate in weap-
onry — a piece of plastic that is still on the drawing
board. Without proper tools to remove it, the sub-
stance inside changes the garment into a divided
skirt. That's pretty inhumane — even for a war.

Immediate CPR often can save lives

By Alton Thygerson



THE SAFE LIFE

March 4, 1990.

Hank Gathers,
an outstanding
Loyola Mary-
mount University
basketball player,
died during the
West Coast Con-
ference tourna-
ment game on

When Gathers collapsed on the
court, millions of people witnessed a
botched resuscitation, shown on tele-
vision sports replays. Reports indi-
cate that cardiopulmonary resuscita-
tion (CPR) was not started for three
to seven minutes after his collapse.
Perhaps CPR would not have saved
him, but the slowness in attempting
resuscitation was not the way to care
for him. Such situations demand a
quicker response than Gathers re-
ceived. There will be a next time, and
responsible people should be able to
react and respond quickly and
properly.

Cardiac arrest (heart stoppage)
can occur in people of any age and
has many causes. Coronary blood
vessels can become clogged, charac-
teristically in older people, but can
occur in younger people, especially
those with a strong family history of
early heart attack, diabetes, high

spasm, cardiac arrest and sudden
death in young people. In addition,
various conditions depriving the
heart of oxygen or blood eventually
cause cardiac arrest. Such conditions
include severe respiratory distress
(as in exercise-induced asthma), se-
vere anemia, shock and certain poi-
sons (e.g., carbon monoxide, cya-
nide). Still other conditions
producing cardiac arrest include
drowning and electrocution.

Bystanders can best cope with car-
diac arrest by: (1) recognizing the
signs of cardiac arrest; (2) telephon-
ing to activate the Emergency Medi-
cal Services (EMS) system; and (3)
providing immediate rescue proce-
dures, which includes CPR.

Cardiopulmonary resuscitation

The major objective of perform-
ing CPR is to provide oxygen to the
brain, heart and other vital organs
until appropriate medical treatment
(advanced cardiac life support) can
restore normal heart and breathing
action. Speed is critical to success.
The highest survival rates happen in
those for whom CPR was started
within four minutes of the time of
the cardiac arrest and who were pro-
vided with advanced cardiac life sup-
port measures within eight minutes
of their cardiac arrest.

The CPR technique is widely
taught by the American Heart Asso-

forming rescue breathing and (3)
providing chest compressions.

1. Opening an airway. Since the
back of the tongue is the most com-
mon cause of airway obstruction in
an unconscious victim, all that may
be needed for someone not breathing
is to move the lower jaw, which in
turn moves the attached tongue. This
is best done by tilting the head back
and moving the lower jaw (chin) for-
ward (known as the head-tilt/chin-
lift method).

2. Breathing. If breathing does not
start after the airway is opened, res-
cue breathing is the quickest way to
get oxygen into the victim's lungs. If
the victim's heart is beating, give one
breath for an adult victim once every
five seconds. If the victim's heart is
not beating, chest compressions will
have to be provided, along with the
rescue breathing.

3. Chest compressions. If no pulse
can be felt at the carotid artery in the
neck for adults, or the brachial ar-
tery in the upper arm for infants,
closed chest cardiac compressions
are performed on the sternum, with
the rescuer pushing down on an
adult about 1½ to 2 inches. Perform
15 chest compressions and then fol-
low with two breaths.

The above material alone lacks de-
tails about the CPR technique. The